Patent claims

1. A process for the preparation of phenylene-bis-benzimidazole-tetrasulfonic acid di-sodium salt comprising the step of reacting o-phenylene-diamine with terephthalic acid and chlorosulfonic acid in the presence of strong acids, wherein the reaction time is 10 to 15 hours.

2. A process according to Claim 1, wherein the reaction time is 11 to 12 hours.

3. A process according to Claim 1, wherein the phenylene-bis-benzimidazole-tetrasulfonic acid obtained in the reaction is, in a first step, dissolved in water and treated with activated carbon, which is then separated off, and where the phenylene-bis-benzimidazole-tetrasulfonic acid disodium salt is precipitated out by adding sodium chloride and separated off and, in a second step, is again dissolved in water and again treated with activated carbon, which is then again separated off, where pure phenylene-bis-benzimidazole-tetrasulfonic acid disodium salt precipitates out of the filtrate by acidification and is then optionally also purified.

4. A process according to Claim 3, wherein the phenylene-bis-benzimidazole-tetrasulfonic acid obtained in the reaction is dissolved in the first step in water in the temperature range from 40 to 80°C.

5. A process according to Claim 1, wherein the phenylene-bis-benzimidazole-tetrasulfonic acid obtained in the reaction is dissolved in the first step in water and, after treatment with and removal of the activated carbon, is precipitated out with sodium chloride as phenylene-bis-benzimidazole-tetrasulfonic acid disodium salt.

6. A process according to Claim 3, wherein the phenylene-bis-benzimidazole-tetrasulfonic acid disodium salt obtained in the first step is dissolved in the second step in water in the temperature range from 30 to 80°C.

7. A process according to Claim 3, wherein the phenylene-bis-benzimidazole-tetrasulfonic acid disodium salt obtained in the first step is dissolved in the second step in water and, after treatment with and removal of the activated carbon, is precipitated out by acidification to about pH 3.

8. A process according to Claim 3, wherein the acidification in the second step is carried out with hydrochloric acid.

9. A process according to Claim 3, wherein the phenylene-bis-benzimidazole-tetrasulfonic acid disodium salt obtained in the second step is washed with phosphoric acid.

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